

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

1. (canceled).
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58. (new) A tunable planar capacitor comprising a substrate; a bias electrode formed on the substrate; a ferro-electric layer formed over the bias electrode; and capacitor electrodes formed over the ferro-electric layer that are spaced to define a gap, wherein:

the bias electrode is more narrow than the ferro-electric layer.

59. (new) A capacitor as claimed in claim 58, wherein the bias electrode has a shape that limits RF current that can flow in the bias electrode and thereby reduces loss in the bias electrode.

60. (new) A capacitor as claimed in claim 59, wherein the bias electrode comprises two fingers connected at one end by a joining member.

61. (new) A capacitor as claimed in claim 60, wherein the two fingers are also connected at an opposite end to define a rectangular bias electrode.

62. (new) A capacitor as claimed in claim 60, wherein the fingers have a width of about one to two microns.

63. (new) A tunable planar capacitor comprising a substrate; a bias electrode formed on the substrate; a ferro-electric layer formed over the bias electrode; and capacitor electrodes formed over the ferro-electric layer that are spaced to define a gap, wherein:

the bias electrode is formed with sufficient size and electrical thickness relative to the gap such that a capacitance exists between the capacitor electrodes and the bias electrodes.

64. (new) A capacitor as claimed in claim 63, wherein the capacitance between the capacitor electrodes and the bias electrodes has non-negligible tuning characteristics.

65. (new) A capacitor as claimed in claim 63, wherein the bias electrode has a thickness of less than about 0.01 microns.

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66. (new) A tunable capacitor as claimed in claim 63, wherein the bias electrode has a thickness of less than about 0.1 skin depths.